

ABSTRACT OF THE DISCLOSURE

[0077] A fast, iterative technique for evaluating M modulo J which may be easily implemented in hardware. In the illustrative embodiment, the invention includes a first circuit (10) for decomposing M into two integers A and $B = M - A$; a second circuit (20) for evaluating $(A \text{ modulo } J)$; a third circuit (30) for evaluating $M' = (A \text{ modulo } J) + B$; and, a fourth circuit (40) for determining whether to output M' as the final answer, or to feedback M' to said first means to evaluate M' modulo J .